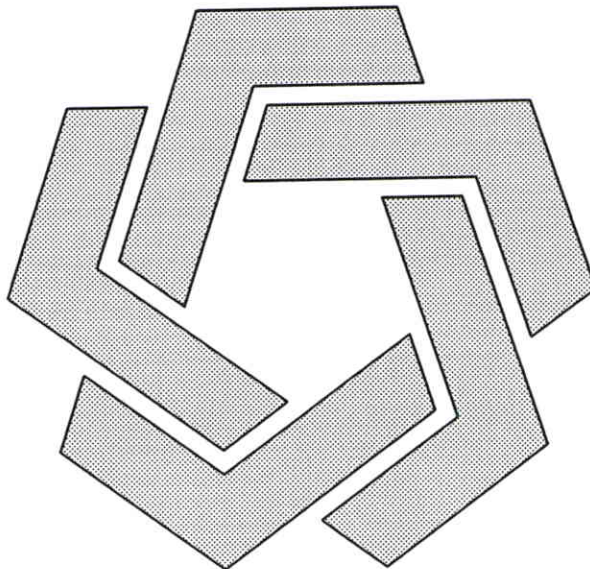


STATE DECISION PACKAGE

**HIDDEN VALLEY COAL COMPANY
HIDDEN VALLEY MINE
ACT/015/007**

PERMIT RENEWAL



**STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING**

JANUARY 30, 1992

File in:

☐ Confidential

☐ Shelf

☒ Expandable

In C

0150007, Incoming # 0060

Date:

01301992

For additional information

**UTAH DIVISION OF OIL, GAS AND MINING
STATE DECISION DOCUMENT AND
TECHNICAL ANALYSIS**

**Hidden Valley Coal Company
Hidden Valley Mine
Permit Renewal**

**Emery County, Utah
ACT/015/007
January 30, 1992**

CONTENTS

- * Administrative Overview
- * Location Map
- * Permitting Chronology
- * Findings
- * State Five-Year Renewal Permit
- * Technical Analysis
- * Cumulative Hydrologic Impact Assessment (CHIA)
- * Affidavit of Publication

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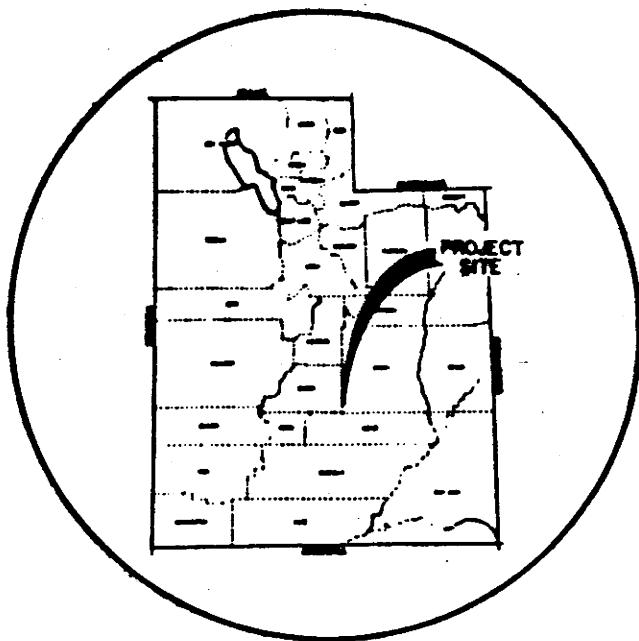
HIDDEN VALLEY COAL MINE
HIDDEN VALLEY COAL COMPANY
PERMIT RENEWAL

ACT/015/007
JANUARY 30, 1992

ADMINISTRATIVE OVERVIEW

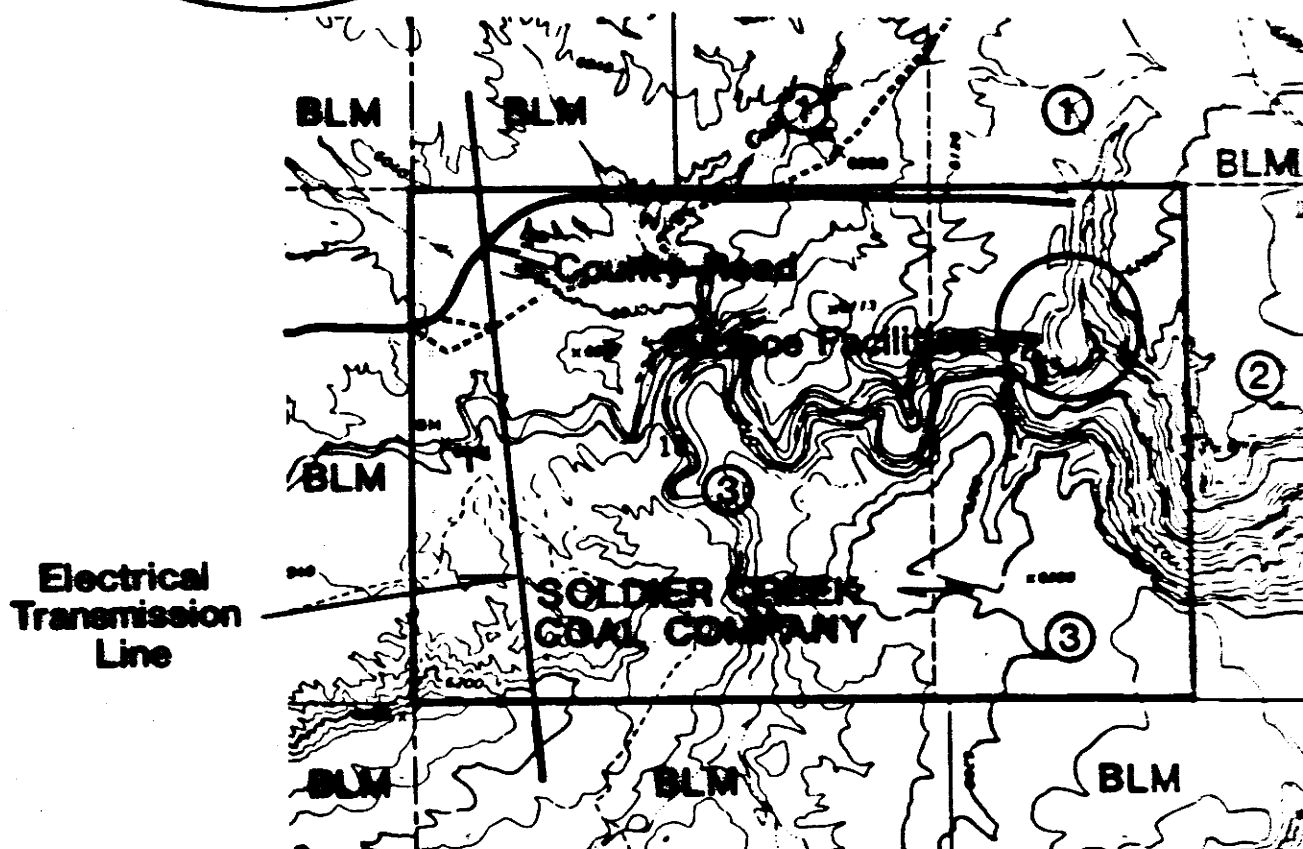
The Hidden Valley Coal Company's Hidden Valley Coal Mine is located in Emery County about three miles east of Highway 10 in Township 23 South, Range 6 East, SLBM, Sections 17 and 18. This coal mine never operated as a commercial venture. The original reclamation permit was issued January 29, 1987. Reclamation was performed during that year. Phase I bond release was determined effective June 17, 1988.

A revised postmining landuse was approved April 27, 1991. During the permit renewal process, no adverse comments were received. The reclamation permit was renewed January 30, 1992.



HIDDEN VALLEY MINE SITE

Township 23 South, Range 6 East
Salt Lake Base and Meridian
Section 18 & the West 1/2 of Section 17



- ① CONSOLIDATED COAL - 50% SURFACE AND MINERAL
THE PITTSBURG MIDWAY - 50% SURFACE AND MINERAL
GULF OIL CORP. - 50% COAL
- ② BANK OF CALIFORNIA (LOVELLA COOK ROYALTY CONVEYANCE)
JOHN E. LANSING
- ③ IVIE CREEK COAL ASSOCIATES -
100% MINERALS



CONSULTANTS GROUP
SALT LAKE CITY, UTAH

**SOLDIER CREEK COAL COMPANY
HIDDEN VALLEY MINE**

**HIDDEN VALLEY MINE
OWNERSHIP**



HIDDEN VALLEY COAL MINE
HIDDEN VALLEY COAL COMPANY
PERMIT RENEWAL

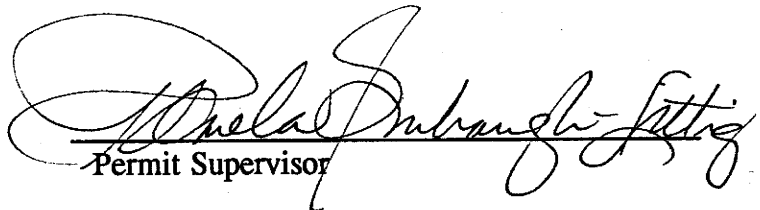
ACT/015/007
JANUARY 30, 1992

CHRONOLOGY

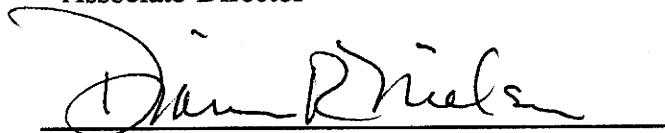
September 25, 1991	Hidden Valley Coal Company submits application for permit renewal.
October 9, 1991	Division determines renewal application complete.
November 12, 1991 through December 3, 1991	Hidden Valley Coal Company publishes notice of permit renewal for four consecutive weeks.
January 30, 1992	No adverse comments received. Division renews reclamation permit.

FINDINGS
FIVE-YEAR RENEWAL
Hidden Valley Coal Company
Hidden Valley Mine
ACT/015/007
Emery County, Utah
January 30, 1992

1. The terms and conditions of the existing permit are being satisfactorily met. (R645-303-233.110)
2. The reclamation operations are in compliance with the environmental protection standards of the State Program. (R645-303-233.120)
3. The requested renewal does not substantially jeopardize the operator's continuing ability to comply with the State Program on existing permit areas. (R645-303-233.130)
4. The operator has provided evidence of having liability insurance. (R645-303-233.140) (Transportation Insurance Company/Policy Number GL707415956)
5. The operator has provided evidence that a performance bond is in effect for the operation and will continue in full force and effect for the proposed period of renewal. (R645-303-233.150) (Surety Bond/St. Paul Fire and Marine Insurance Company #400-HJ-8041 in the amount of \$68,606)


Permit Supervisor


Associate Director


Director

NON-FEDERAL

PERMIT
ACT/015/007

January 30, 1992

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
(801) 538-5340

RECEIVED

FEB 24 1992

DIVISION OF
OIL GAS & MINING

This permit, ACT/015/007, is issued for the state of Utah by the Utah Division of Oil, Gas and Mining (Division) to:

Hidden Valley Coal Company
1801 East University Drive
Phoenix, Arizona 85034
(602) 254-8465

for the Hidden Valley Mine. A Surety Bond is filed with the Division in the amount of \$68,606, payable to the State of Utah, Division of Oil, Gas and Mining. The Division must receive a copy of this permit signed and dated by the permittee.

- Sec. 1 **STATUTES AND REGULATIONS** - This permit is issued pursuant to the Utah Coal Mining and Reclamation Act of 1979, Utah Code Annotated (UCA) 40-10-1 et seq, hereafter referred to as the Act.
- Sec. 2 **PERMIT AREA** - The permittee is authorized to conduct reclamation activities on the following described lands within the permit area at the Hidden Valley Mine, situated in the state of Utah, Emery County, and located:

Township 23 South, Range 6 East, SLBM

Section 17: W1/2
Section 18: All

This legal description is for the permit area of the Hidden Valley Mine. The permittee is authorized to conduct reclamation activities on the foregoing described property subject to the conditions of all applicable conditions, laws and regulations.

- Sec. 3 **COMPLIANCE** - The permittee will comply with the terms and conditions of the permit, all applicable performance standards and requirements of the State Program.
- Sec. 4 **PERMIT TERM** - This permit becomes effective on January 30, 1992, and expires on January 29, 1997.

- Sec. 5 ASSIGNMENT OF PERMIT RIGHTS** - The permit rights may not be transferred, assigned or sold without the prior written approval of the Division Director. Transfer, assignment or sale of permit rights must be done in accordance with applicable regulations, including but not limited to 30 CFR 740.13{e} and R645-303-300.
- Sec. 6 RIGHT OF ENTRY** - The permittee shall allow the authorized representative of the Division, including but not limited to inspectors, and representatives of the Office of Surface Mining Reclamation and Enforcement (OSM), without advance notice or a search warrant, upon presentation of appropriate credentials, and without delay to:
- (a) have the rights of entry provided for in 30 CFR 840.12, R645-400-220, 30 CFR 842.13 and R645-400-110;
 - (b) be accompanied by private persons for the purpose of conducting an inspection in accordance with R645-400-100 and R645-400-200 when the inspection is in response to an alleged violation reported to the Division by the private person.
- Sec. 7 SCOPE OF OPERATIONS** - The permittee shall conduct reclamation activities only on those lands specifically designated as within the permit area on the maps submitted in the approved plan and approved for the term of the permit and which are subject to the performance bond.
- Sec. 8 ENVIRONMENTAL IMPACTS** - The permittee shall take all possible steps to minimize any adverse impact to the environment or public health and safety resulting from noncompliance with any term or condition of the permit, including, but not limited to:
- (a) Any accelerated or additional monitoring necessary to determine the nature and extent of noncompliance and the results of the noncompliance;
 - (b) immediate implementation of measures necessary to comply; and
 - (c) warning, as soon as possible after learning of such noncompliance, any person whose health and safety is in imminent danger due to the noncompliance.
- Sec. 9 CONDUCT OF OPERATIONS** - The permittee shall conduct its operations:
- (a) in accordance with the terms of the permit to prevent significant, imminent environmental harm to the health and safety of the public; and

- (b) utilizing methods specified as conditions of the permit by the Division in approving alternative methods of compliance with the performance standards of the Act, the approved Utah State Program and the Federal Lands Program.

- Sec. 10 **EXISTING STRUCTURES** - As applicable, the permittee will comply with R645-301 and R645-302 for compliance, modification, or abandonment of existing structures.
- Sec. 11 **RECLAMATION FEE PAYMENTS** - The operator shall pay all reclamation fees required by 30 CFR Part 870 for coal produced under the permit, for sale, transfer or use.
- Sec. 12 **AUTHORIZED AGENT** - The permittee shall provide the names, addresses and telephone numbers of persons responsible for operations under the permit to whom notices and orders are to be delivered.
- Sec. 13 **COMPLIANCE WITH OTHER LAWS** - The permittee shall comply with the provisions of the Water Pollution Control Act (33 USC 1151 et seq,) and the Clean Air Act (42 USC 7401 et seq), UCA 26-11-1 et seq, and UCA 26-13-1 et seq.
- Sec. 14 **PERMIT RENEWAL** - Upon expiration, this permit may be renewed for areas within the boundaries of the existing permit in accordance with the Act, the approved Utah State Program and the Federal Lands Program.
- Sec. 15 **CULTURAL RESOURCES** - If during the course of reclamation operations, previously unidentified cultural resources are discovered, the permittee shall ensure that the site(s) is not disturbed and shall notify the Division. The Division, after coordination with OSM, shall inform the permittee of necessary actions required. The permittee shall implement the mitigation measures required by Division within the time frame specified by Division.
- Sec. 16 **APPEALS** - The permittee shall have the right to appeal as provided for under R645-300-200.

The above conditions (Secs. 1-16) are also imposed upon the permittee's agents and employees. The failure or refusal of any of these persons to comply with these conditions shall be deemed a failure of the permittee to comply with the terms of this permit and the lease. The permittee shall require his agents, contractors and subcontractors involved in activities concerning this permit to include these conditions in the contracts between and among them. These conditions may be revised or amended, in writing, by the mutual consent of the Division and the permittee at any time to adjust to changed conditions or to

correct an oversight. The Division may amend these conditions at any time without the consent of the permittee in order to make them consistent with any federal or state statutes and any regulations.

THE STATE OF UTAH

By: Deanne R. Nielson

Date: 1-30-92

I certify that I have read, understand and accept the requirements of this permit and any special conditions attached.

Alan Edmonson
Authorized Representative of
the Permittee

Date: 2-14-92



Norman H. Bangerter
Governor
Dee C. Hansen
Executive Director
Dianne R. Nielson, Ph.D.
Division Director


State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340

January 27, 1992

TO: Pamela Grubaugh-Littig, Permit Supervisor

FROM: Joseph C. Helfrich, Regulatory Program Coordinator 

RE: Compliance Review for Section 510(c) Findings, Hidden Valley Coal Company, Hidden Valley Mine, ACT/015/007, Folder #5, Carbon County, Utah

As of the writing of this letter, there are no NOV's or CO's which are not corrected or in the process of being corrected. Any NOV's or CO's that are outstanding are in the process of administrative or judicial review. There are no finalized Civil Penalties which are outstanding and overdue in the name of Hidden Valley Coal Company.

Finally, they do not have a demonstrated pattern of willful violations, nor have they been subject to any bond forfeitures for any operation in the state of Utah.

jbe
A:\510(C)

DATE: 04 FEB 92

APPLICANT VIOLATOR SYSTEM
APPLICATION EVALUATION REPORT

TIME: 10:05:59

STATE: UT

APPNO: ACT015007

SEQNO: 0

PAGE: 1

APPLICANT'S ENTITY ID: 124528

APPLICANT'S NAME : HIDDEN VALLEY COAL CO

SYSTEM RECOMMENDATION IS BASED ON ENTITY OFT

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* SYSTEM RECOMMENDATION : ISSUE
* PREVIOUS SYSTEM RECOMMENDATION:
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F2/PROCEED F3/QUIT F4/MAIN F6/REPORT F9/V.VIOL F10/V.OFT

TECHNICAL ANALYSIS

California Portland Cement
Hidden Valley Coal Company
Hidden Valley Mine
INA/015/007, Emery County, Utah

December 8, 1986

UMC 785.19 Alluvial Valley Floors (JW)

The pad areas to be reclaimed which are adjacent to Ivie Creek, a perennial stream, encompasses less than 4 acres. No historical record of attempts to farm in this area exist, probably due to the extremely limited area.

Since the proposed reclamation operation does not include the extraction of coal nor significant physical disturbance of the surface or groundwater regime, and since the area would provide negligible support to agricultural production, the requirements of UMC 785.19 (d) and (e) are not applicable and are hereby waived.

UMC 817.13-15 Casing and Sealing (PGL/JW)

Applicant's Proposal

There are four shallow exploration adits in the Hidden Valley Mine permit area (page 13). Incombustible material will be backfilled into each adit at least 25 feet. There are seven exploration drill holes associated with the Hidden Valley Mine. Four of these holes encountered artesian flow, were cased and completed as water wells. Valves were installed, wrapped with insulation, covered and buried. An inspection on July 31, 1986 determined that there has been no leaking from the four flowing holes. The water rights for these four holes (drill holes #1, 2, 3 and 7) have been extended through January 31, 1988 (shown in plan as an attachment) by the Division of Water Rights.

There are three dry exploration holes. Drill hole #4 was not found. Drill hole #5 will be plugged with a five-foot surface plug and drill hole #6 was found to be cemented to the surface with a survey marker installed in the plug.

Compliance

The applicant's proposal to backfill the exploration adits with at least 25 feet of incombustible material is

acceptable, because the adits are shallow and undeveloped. Therefore, the requirements for block seals have been waived in this case.

The dry drill holes will be plugged with five feet of surface cement. The fourth drill hole will be located at the time of reclamation, if possible, and will be plugged with five feet of surface cement (page 16a, PAP).

Drill holes #1, 2, 3 and 7 are part of Hidden Valley Coal Company's water rights that have been extended until January 31, 1988. If the water rights are terminated, then abandonment procedures as required by the Utah Division of Water Rights Administrative Rules for Water Well Drillers will be undertaken within 90 days of the date of final notice on the water right. If the water rights are transferred, Hidden Valley Coal Company will follow the procedures in 817.53 for transfer of water rights (page 16-a, PAP).

The applicant will comply when the following stipulation is met.

Stipulation 817.13-15 (1)-JW

Within 30 days of permit approval, the applicant must commit to plug and abandon the drill holes #1, 2, 3 and 7, according to the procedures described in the Utah Division of Water Rights' Administrative Rules for Water Well Drillers upon abandonment of the wells unless these holes are transferred according to the requirements of UMC 817.53.

UMC 817.21 Topsoil: General Requirements (DD)

Existing Environment and Applicant's Proposal

One topsoil stockpile exists on the "B" seam pad. The stockpile consists of approximately 770 cubic yards, the material is a sandy loam with a calculated Ec of 2.43 and a SAR of 1.8.

Compliance

The applicant complies with this section.

Stipulations

None.

UMC 817.22-817.23 Topsoil: Removal and Storage (DD)

Existing Environment and Applicant's Proposal

The applicant does not propose to disturb any additional acreage, therefore no topsoil will be removed and stored. These sections are not applicable.

UMC 817.24 Topsoil: Redistribution

Existing Environment and Applicant's Proposal

The existing topsoil stockpile will be redistributed over the 2.1 acres of the "B" seam pad, at an approximately depth of 2.5 inches. Samples of the lower and upper "B" seam pad materials have calculated Ec values of 3.67 and 4.42 mmhos/cm³ and SAR values of 3.41 and 2.32 respectively.

The applicant states that the "A" seam pad and sediment pond were constructed of alluvial silt loams, rocky sandy loams and coal seam overburden material. There is no topsoil available for this pad so the existing mixture of materials will be used for the seed bed. The applicant also commits to salvaging the better soil materials as they are exposed during reclamation (page 53, MRP). A sample from the "A" seam pad had a calculated Ec of 4.15 and an SAR of 5.75.

Compliance

The proposed topsoil redistribution plan is in compliance with this section. The topsoil that was salvaged and that will be redistributed over the "B" seam pad will only cover the pad with approximately 2.5 inches. The sample analysis of the "B" seam pad material, which will be within the root zone of all plants, indicates that the material should not be limiting to plant growth, considering the species proposed for revegetation. The analysis of the "A" seam pad material also indicates that the material is a suitable plant growth medium, again considering the revegetation species proposed for the site.

Stipulations

None.

UMC 817.25 Topsoil: Nutrients and Soil Amendments

Existing Environment and Applicant's Proposal

The soil and pad materials are low in fertility; they lack sufficient cation exchange capacity and organic matter to provide the basic nutrients for plant growth. Phosphorous contents are especially low. Soil textures are sandy loams with saturation percentages at expected values for the sandy nature of these soils. However, the material should hold adequate water.

The applicant proposes to overcome the poor fertility and low organic matter contents of the soils by applying green alfalfa hay mulch at a rate of 4000 lbs./acre. Diammonium phosphate fertilizer will also be spread in the fall at the rate of 242 lbs./acre. This is equivalent to 48 pounds of N and 130 pounds of $P_{2}O_{4}$ per acre. The mulch and fertilizer will be covered by dragging operations. In the spring, 100 pounds of liquid urea will be applied per acre, which is equivalent to 46 pounds of N per acre. This spring application of urea is to compensate for increased soil microbial activity due to organic matter decomposition. The alfalfa hay mulch will supply approximately 96 pounds of N, 18 pounds of $P_{2}O_{5}$ and 81 pounds of $K_{2}O$ per acre upon decomposition.

Compliance

Considering the precipitation regime and plant communities in the vicinity, the fertilization program appears somewhat excessive. The project consultant, however, has used similar reclamation plans on other comparable sites with excellent results.

The applicant is in compliance with the above section and the proposed fertilization plan is approved. The following alternative recommendations are also acceptable to the Division.

- (1) Diammonium phosphate is much more expensive than Ammonium phosphate with an analysis of (16-20-0). Ammonium phosphate is much more readily available. Ammonium phosphate (16-20-0) at the proposed rate of 242 lbs./acre would also supply 48 lbs./acre of $P_{2}O_{5}$, which is recommended by Utah State University for soils with similar phosphorous contents.

- (2) Lowering the proposed rate of 242 lbs/acre of Diammonium phosphorous to 100 lbs./acre would also lower the P_{205} application rate to 54 lbs/acre, which is more in line with state recommendations and would be less costly.

Stipulations

None.

817.41-42 Hydrologic Balance (TM)

Applicant's Proposal

The applicant has proposed to monitor flow in Ivie Creek on a semi-annual basis according to the requirements of the post-mining monitoring guidelines (page 62-63, PAP). The location and description of these monitoring points is given on page 62A of the PAP. Water quality samples will also be secured at the discharge points from the reclaimed area to Ivie Creek during each runoff event encountered during scheduled monitoring visits (water quality and revegetation checks).

The channels existing previous to mining will be reconstructed and sediment control will be supplied during the reclamation bonding period. No reclamation activities will be conducted in the buffer zone except for the removal of culverts that empty into the creek and the subsequent restoration of channels (page 64, PAP).

Compliance

The applicant complies with the requirements of these sections. The applicant proposes to reclaim all culverted or disturbed ephemeral channels within the permit area to meet design specifications of UMC 817.44. All sediment pond control structures (i.e., sediment pond) will be removed during reclamation and replaced with berms and silt fences to adequately control sediment during the reclamation pond period until the site has become stabilized. The road leading into the site will be reclaimed and waterbarred to minimize erosion and water pollution (see 817.160-166). All reclaimed channels, exhibiting excessive velocities, will be riprapped in the appropriate sections to minimize water pollution. Through the use of alternative sediment controls, the applicant has demonstrated that he will meet all applicable state and federal effluent limitation standards.

Stipulations

None.

UMC 817.43-45 Hydrologic Balance: Stream Channel Diversions (TM)

Applicant's Proposal

The specifics of stream channel reclamation are spelled out by the applicant on pages 28-34 of the PAP. The 250 feet of 48-inch diameter culvert in the B seam pad will be removed and the ephemeral channel restored to an approximately natural grade. The gradient will be uniform at 10.5 percent, the sideslopes will be at 4h:1v, and the bottom width will be 10 feet. For any section of the channel not resting on bedrock, the fill will be riprapped to protect against erosion (page 29, PAP).

The access road leading to the site will be reclaimed and waterbarred to prevent erosion. Two culverts will be removed during the reclamation of the road. A 48-inch culvert located at the crossing of the ephemeral channel (see Plate V) will be removed and a channel excavated to allow fording of the creek. This channel is expected to rest on bedrock. The gradient of this channel will be the same as the culvert (0.071 ft./ft.) (page 51, PAP).

As the road and A-seam pad are regraded, an 18-inch culvert will be removed. With the filling in of the roadside ditch, the normal drainage to the 18-inch culvert will be diverted.

With the re-establishment of the ephemeral channel, regrading of the access road and the A-seam pad, the area draining to the sediment pond will be quite small, less than one acre. The sediment pond will be removed and the area draining the A-seam pad will be allowed to flow through the pond area into Ivie Creek after the discharge structures associated with the pond are removed. This drainage will be passed via triangular ditch through a silt fence (page 33, PAP).

Compliance

The applicant has demonstrated compliance with this section through the appropriate design calculations for channel restoration and through the use of sediment control, consisting of berms and silt fences along the edge of the regraded slopes and the ephemeral channel. The combination of channel, bed, and bank and flood plain configurations

are adequate to pass safely the peak runoff of 100-year, 24-hour precipitation event for all restored channels. All restored channels have been designed to prevent additional contributions of suspended solids to streamflow or runoff outside the permit area. Any runoff leaving the permit area will not be in excess of State or Federal standards.

Stipulations

None.

UMC 817.46-47 Hydrologic Balance: Sediment Ponds (TM)

Applicant's Proposal

The applicant has proposed to remove the existing decant structures from the sediment pond and breach the embankment to form a channel to Ivie Creek. Due to the layout of the site, very little drainage area, less than 1 acre, will contribute to the pond, following backfilling and grading of the site. Due to the arid climate and the lack of significant runoff, the applicant proposes to use alternative sediment controls (i.e., berms and silt fences) to control sediment from leaving the site.

Compliance

Based on past observation of the runoff characteristics of the site and the final site configuration, removal of the sediment pond is appropriate. No runoff will leave the disturbed area without prior treatment to prevent additional contributions of suspended sediments from entering the surface waters of Ivie Creek.

Considering the small drainage area and the runoff characteristics of the final site configuration, the sediment control plan during the reclamation phase is considered complete and adequate to meet the requirements of this regulation.

Stipulation

None.

UMC 817.49 Permanent and Temporary Impoundments (TM)

Applicant's Proposal

No temporary or permanent impoundments will be left on site. The current sediment pond will be breached and rendered ineffective.

Compliance

The applicant is in compliance with this section.

Stipulations

None.

UMC 817.52 Hydrologic Balance: Surface and Ground Water Monitoring (TM)

Applicant's Proposal

Surface flow to Ivie Creek, a perennial stream, will be sampled and measured semi-annually, during the months of May and September. No groundwater sampling is planned since there was virtually no underground development and no mine water discharge. Water quality will also be sampled at discharge points (i.e., outlets to all restored channels) from the reclaimed area when flow is observed and at the two established monitoring points on Ivie Creek (page 62a, PAP).

Compliance

The applicant complies with the requirements of this section and the Division's water monitoring guidelines.

Stipulations

None.

UMC 817.53 Transfer of Wells (TM)

Applicant's Proposal

The applicant proposes to maintain the current drill holes 1, 2, 3 and 7 in their current condition. Drill hole #4 was not found. Drill hole #6 was found to be cemented to the surface with a survey marker installed in the plug. Drill hole #5 will be plugged with a five-foot surface plug during reclamation work to be conducted during the fall of 1986. Water rights for drill hole 1, 2, 3 and 7 are in place until January 31, 1988.

Compliance

The applicant is in compliance with this section until such time that these wells are transferred, then the applicant must meet the requirements spelled out under UMC 817.13 through 817.15.

Stipulations

None.

UMC 817.55 Hydrologic Balance: Discharge of Water into an Underground Mine (TM)

Applicant's Proposal

The applicant will fill and close all exploration adits at the underground mine during reclamation (see 817.13-15).

Compliance

Since all underground openings will be sealed, no runoff will enter or leave these openings; therefore the applicant is in compliance with this section.

Stipulations

None.

UMC 817.56 Hydrologic Balance: Post Mining Rehabilitation of Sedimentation Ponds, Diversions, Impoundments, and Treatment Facilities (TM)

Applicant's Proposal

The applicant will re-establish natural conveyance of surface waters through the permit area. The sediment pond will be breached during reclamation and therefore will not be considered an impoundment (page 63, PAP).

Compliance

The applicant meets the requirements of this section.

Stipulations

None.

UMC 817.57 Stream Buffer Zone (TM)

Applicant's Proposal

Reclamation activities which will occur in the buffer zone are limited to removal of culverts that empty into the creek and the restoration of ephemeral channels which flow into Ivie Creek. Silt fences will aid in controlling sediments in these sensitive areas.

Compliance

Since the applicant will be restoring drainage through the disturbed area to Ivie Creek based on the requirements of UMC 817.43 and UMC 817.44, and water quality and quantity will not be adversely affected, then the applicant is in compliance with this section.

Stipulations

None.

UMC 817.71-74 Disposal of Underground Development Waste and Excess Spoil and Non-Acid and Non-Toxic Coal Forming Coal Processing (PGL)

This section is not applicable as there was never any underground development waste generated at this site.

UMC 817.81-88 Coal Processing Waste Banks (PGL)

This section is not applicable, as there was never any coal processing waste generated at this site.

UMC 817.89 Disposal of Non-Coal Wastes (PGL)

Applicant's Proposal

The applicant describes how non-coal wastes will be handled during reclamation on page 50a. A waste bin will be located onsite for the disposal of solid and liquid wastes. The non-coal waste will be hauled off-site to an approved landfill for disposal.

Compliance

The applicant will dispose of non-coal wastes in an acceptable manner. The applicant complies with this section.

Stipulations

None.

UMC 817.91-93 Coal Processing Waste: Dams and Embankments (PGL)

This section is not applicable as there was never any coal processing waste generated at this site.

UMC 817.95 Air Resources Protection (PGL)

Applicant's Proposal

The applicant describes fugitive dust emissions control during reclamation operations in Appendix i, page 7, (Air Pollution Control Plan) and on page 17a. This is a remote, protected canyon. During periods of winds in excess of 50 mph, reclamation work will be delayed until winds abate.

Compliance

The applicant has committed to appropriate fugitive dust control measures during reclamation. The applicant complies with this section.

Stipulations

None.

UMC 817.97 Protection of Fish, Wildlife and Related Environmental Values (KMM)

Existing Environment and the Applicant's Proposal

The resident wildlife population consists of small mammals, birds and reptiles and their predators. An active prairie falcon nest across Ivie Creek from the mine site represents the only sensitive species known in the area. An owl which nested in the vicinity of the adits could not be relocated.

Compliance

Since the site is being reclaimed, negative impacts on wildlife should be minimal. Revegetation of the unproductive site will enhance wildlife habitat, providing additional food and cover. Reclamation is scheduled for autumn and should not adversely impact the spring nesting falcon. Development of water sources for wildlife enhancement is not appropriate at this site since the mine is adjacent to a perennial creek which will not be impacted by the reclamation activities. The applicant is in compliance with this section.

Stipulations

None.

UMC 817.99 Slides and Other Damage

Applicant's Proposal

The applicant has committed to mitigate any slide damage on the permit area during the bond liability period (addendum page 7, PAP).

Compliance

Applicant complies with this section.

Stipulations

None.

UMC 817.101 Backfilling and Grading: General (PGL)

Applicant's Proposal

The exposed coal seams will be graded to a slope of approximately 2h:1v. Slopes will be covered with 2" of topsoil. Backfill volumes will be about 11,000 cubic yards (page 18, PAP).

Compliance

A minimum static factor of safety of 1.35 was demonstrated for the backfilled highwalls (Appendix VII-Slope Stability Analysis, PAP). The applicant, however, did not specifically detail recontouring of the sediment pond. The applicant will comply when the following stipulation is met.

Stipulation 817.101-(1)-PGL

The sideslopes of the sediment pond shall be reduced to at least a 3h:1v slope during final reclamation and recontouring of the pond area.

UMC 817.103 Backfilling and Grading: Covering Coal and Acid-Forming and Toxic-Forming Materials (PGL/DD)

Applicant's Proposal

The applicant will cover the exposed A and B seams to a slope of approximately 2h:1v (page 18). The slopes will then be covered with approximately 2 inches of topsoil and revegetated.

If any coal or acid- or toxic-forming materials are discovered during excavation and backfilling, they will be placed against the coal seams and covered with non-toxic materials (page 27).

The only material on-site which could be considered acid-forming or toxic is the coal. Tests on the coal quality (Appendix VI of the MRP) shows one sample has a total sulphur content of 3.94 percent, with no carbonates. Two other samples had contents of .4 and 1.19 percent. Ec of the coal was 6.1, 8.2 and 10.9 with SAR of 45.6, 6.2 and 4.8. Selenium and Boron are low for all samples. Although the coal materials may be considered acid-forming and saline, these materials are not readily evident on the site. The applicant commits to placing any material that may be toxic or acid-forming, that may be exposed during excavation, against the coal seam and backfilled with non-toxic materials (page 27, MRP).

Compliance

The only evident coal on the site is the exposed coal outcrop. The outcrop will be backfilled with non-toxic material. Since any potential acid-forming or toxic material that is exposed during excavation will be placed against the highwall and backfilled with non-toxic material, the applicant is in compliance with this section.

Stipulations

None.

UMC 817.106 Regrading or Stabilizing Rills and Gullies (PGL)

Applicant's Proposal

The applicant committed to repair rills and gullies throughout the bond liability period on page 27 of the PAP.

If there are persistent rill and gully sites, they will be stabilized with small gabions or rock-check dams (page 27, PAP).

Compliance

Applicant complies with this section.

Stipulations

None.

UMC 817.111 Revegetation: General (KMM)

See specific sections.

UMC 817.112 Use of Introduced Species (KMM)

Existing Environment and Applicant's Proposal

The revegetation seed mix contains seven native and three introduced species (i.e., Yellow sweetclover, Russian wildrye and Crested wheatgrass; p. 58-59).

Compliance

Yellow sweetclover is used for its nitrogen fixing value and should also serve as a nurse crop for the slow growing natives. Small amounts (one pound each) of Russian wildrye and Crested wheatgrass are included to assist in erosion control while the natives are becoming established. Nearby test plots have demonstrated that they are adapted to the area. They will provide food and cover for small animals and add diversity to the vegetation community until local natives invade. Since they are already established on site from old stabilization seedings and are being planted in small quantities, they should not be overly competitive. They are not considered poisonous or noxious. The applicant is in compliance with this section.

Stipulations

None.

UMC 817.113 Revegetation: Timing (KMM)

Existing Environment and Applicant's Proposal

The applicant proposes to seed in late fall (p. 59).

Compliance

Late fall is the appropriate time to seed in this locality. The proposal is in compliance with this section.

Stipulations

None.

UMC 817.114 Revegetation: Mulching (KMM)

Existing Environment and Applicant's Proposal

The applicant proposes to mulch with 4000 lbs. of alfalfa anchored with soil dragged over the hay or secured on steep slopes with erosion control netting (p.59).

Compliance

If covered in place, the alfalfa hay should be an important addition to the substitute soil of the reclamation project. The applicant will be in compliance with this section if the alfalfa can be adequately secured with a covering of dirt. Where the alfalfa cannot be secured in that manner, it will be secured with netting (e.g., on steep slopes).

Stipulations

None.

UMC 817.115 Revegetation: Grazing (KMM)

Existing Environment and Applicant's Proposal

Livestock grazing is limited in the area and will be limited further by fences on the access road and Ivie Creek (p. 56, 59 and Plate III). While these fences will not restrict wildlife or significantly reduce grazing, they will prevent livestock trampling damage on the revegetation area.

Compliance

There are currently no plans for permitting grazing during the last years of the bonding period. This will not represent any major difference between management of the mine site and adjacent areas, and will be in concert with the proposed post mining land use. The applicant is in compliance with this section.

Stipulations

None.

UMC 817.116 Revegetation: Standards for Success (KMM)

Existing Environment and Applicant's Proposal

Revegetation success will be based on comparison of the mine area to a reference area established in the "Steep rocky slope" vegetation type. Qualitative monitoring will be done

monthly for the first two years and annually thereafter. Line intercept transects will be used in year three to check vegetation progress to determine the need for reseeding. The area will be quantitatively sampled for cover, density and productivity in years nine and ten of the bond period (p. 60-61).

Compliance

The applicant has chosen a reasonable reference area and sampling techniques for comparison with revegetated areas. Monitoring should be adequate to determine problem areas and initiate remedial action. Cover, density, and productivity will be sampled to determine success of revegetation because post mining land uses include grazing and wildlife habitat. The extended liability period will be for 10 years after the last augmentation of revegetation since the mine site receives less than 26 inches of precipitation. The applicant is in compliance with this section.

Stipulations

None.

UMC 817.132 Cessation of Operations: Permanent (PGL)

There was no underground mining at this mine. Development ceased in August, 1980.

UMC 817.133 Postmining Land Use (KMM)

Existing Environment and Applicant's Proposal

Cattle grazing and wildlife habitat are the main land uses adjacent to the mine area. Cattle grazing is limited to 1 AUM per 10 acres. Both uses are proposed as post mining land uses although cattle grazing is likely to be only an occasional use especially in the relatively steep disturbed area. The primary purpose of revegetation will be to stabilize the site.

Compliance

The post mining land use is comparable to pre-mining uses and is compatible with other uses in the area. The applicant is in compliance with this section.

Stipulations

None.

UMC 817.150-156 Roads: Class I (PGL)

Applicant's Proposal

The Class I haul road was constructed with public funds and is dedicated to Sevier and Emery counties (the ROW documents are found in Appendix I).

Compliance

The proper documents for transfer, ownership and maintenance of the public road are contained in the PAP. Applicant complies with this section.

Stipulations

None.

UMC 817.160-166 Roads: Class II (PGL)

Applicant's Proposal

The applicant's as-built road alignment is shown in Figure 6.1: Appendix D. The applicant addresses closing the road, drainage patterns being restored, and roadbeds being ripped, scarified and revegetated. A "road closed" sign will be placed at the terminus of the paved road. A 3-wire, 42-inch high barbed wire fence tied to the ledges across the upper portion of the road to prevent access will be constructed.

This fence will be checked during each site visit and maintained as required to retain the integrity of the fence. The 48-inch and two 18-inch diameter culverts will be removed and the natural ephemeral drainage restored and stabilized. Eleven water bars will be spaced according to Table 3b and located on the ripped roadbed according to Plate III. Existing soil material will be used as the growing medium with properly prepared mulching and fertilizing practices. The roadbed will be ripped and scarified prior to revegetation.

Compliance

The roadbed will be ripped and scarified and the fence and gate will prevent access to the property. The restoration of the road meets the reclamation standards of UMC 817.166. Applicant complies with this section.

Stipulations

None.

UMC 817.170-176 Roads: Class III (PGL)

There are no Class III roads on the site, therefore this section is not applicable.

UMC 817.180-181 Transportation Facilities and Other Support
Facilities and Utility Installations (PGL)

There were no facilities constructed, therefore, this section is not applicable.

0920R/4-21

HIDDEN VALLEY
RECLAMATION COST ESTIMATE
November 19, 1986

	<u>Unit Cost</u>	<u>Total Cost</u>
1. Hauling roadbase 1800 cu yds, 25 hrs.	\$ 2.30	\$ 4,140
spreading topsoil 770 cu yds, 11 hrs.	\$ 1.61	\$ 1,240
Sub total		<u>\$ 5,380</u>
2. Removing culverts, 89 hrs.		
road 80' of 48", 213 cu yds excavation	\$ 1.36	\$ 290
60' of 18", 20 cu yds excavation	\$ 3.85	\$ 77
pads 250' of 48", 10,924 cu yds excavation	\$ 1.36	\$ 14,857
230' of 18", 501 cu yds excavation	\$ 3.85	\$ 1,945
seed pond 40' of 18", 178 cu yds excavation	\$ 3.32	\$ 591
remove pipe and concrete pads		\$ 200
sampling for particle analysis		\$ 250
Sub total		<u>\$ 18,210</u>
3. Covering coal seams and grading, 179 hrs.		
Collapse structures in 4 adits		\$ 480
Fill 4 adits 296 cu yds	\$ 3.39	\$ 1,003
"A" seam cover 2500 cu yds	\$ 3.39	\$ 8,475
"B" seam cover 10250 cu yds	\$ 3.39	\$ 34,743
Slope grading 1800 cu yds	\$ 3.39	\$ 6,102
General grading 500 cu yds	\$ 3.39	\$ 1,695
Sub total		<u>\$ 52,503</u>
4. Riprap channels, 44 hrs.		
80' in road 67 cu yds	\$ 21.13	\$ 1,415
250' in pad 930 cu yds	\$ 21.00	\$ 19,350
100' in A Pad 15 cu yds	\$ 21.00	\$ 315
Hauling rock all sites	\$ 1.78	\$ 2,422
Sub total		<u>\$ 23,503</u>

Page 2
Hidden Valley
Reclamation Cost Estimate
November 19, 1986

	<u>Unit Cost</u>	<u>Total Cost</u>
5. Waterbars in road and ripping, 10 hrs.		
11 waterbars	\$	\$ 650
rip, 2.4 acres	\$ 314.58	\$ 755
Sub total		<u>\$ 1,405</u>
6. Seedbed preparation and seeding, 50 hrs.		
benches, 4.2 acres	\$ 1,800	\$ 7,560
road and roadbase site, 2.5 acres	\$ 1,800	\$ 4,500
Sub total		<u>\$ 12,060</u>
7. Fences, gates and erosion netting, 55 hrs.		
fences, 180'	\$ 4.60	\$ 843
gate, 1 ea.		\$ 200
silt fences, 700'	\$ 5.85	\$ 4,095
erosion netting, 2250 sy	\$ 0.55	\$ 1,238
Sub total		<u>\$ 6,376</u>
8. Drill Hole plugging, 2 holes (dry)	\$ 500	\$ 1,000
Sub total		<u>\$ 1,000</u>
9. Miscellaneous, 64 hrs.		
Equipment mobilization		\$ 5,000
Equipment rental		\$ 2,500
Materials disposal		\$ 2,500
Sub total		<u>\$ 10,000</u>
	<u>Reclamation Total</u>	<u>\$130,437</u>
10. Monitoring, 10 years		
Water sampling, 20 trips		\$ 16,000
Revegetation checks, 20		\$ 7,000
<u>Total</u>		<u>\$ 23,000</u>

Page 3
Hidden Valley
Reclamation Cost Estimate
November 19, 1986

10. Contingency 10%	\$ 15,344
Escalation 1.62% for 1 yr. (1987 dollars)	\$ 2,734
<u>Sub total</u>	<u>\$ 18,078</u>
<u>Grand Total</u>	<u>\$171,515</u>

(1987 dollars)

Means Site Work Cost Data, 1986, 5th Edition
Hours represent total equipment time.

0920R/22

HIDDEN VALLEY CHIA

CUMULATIVE HYDROLOGIC IMPACT ASSESSMENT

CALMAT

HIDDEN VALLEY MINE

INA/015/007

EMERY COUNTY, UTAH

December 8, 1986

I. INTRODUCTION

The purpose of this report is to provide a Cumulative Hydrologic Impact Assessment (CHIA) for Calmat's Hidden Valley Mine located in Emery County, Utah (Figure 1). The assessment encompasses the probable cumulative impacts of all anticipated coal mining in the general area on the hydrologic balance and whether the operations proposed under the application have been designed to prevent damage to the hydrologic balance outside the proposed mine plan area. This report complies with federal legislation passed under the Surface Mining Control and Reclamation Act (SMCRA) and subsequent Utah and federal regulatory programs under UMC 786.19(c) and 30 CFR 784.14(f), respectively.

Calmat's Hidden Valley Mine is located approximately seven miles southwest of Emery, Utah in Section 17 and 18, Township 23 South, Range 6 East (Figure 1). The mine is located in the Emery Coal Field 35 miles east of Salina, 70 miles south of Price in Sevier and Emery counties. The effective width of the Emery Coal Field is from 4-8 miles and a length of about 35 miles (Doelling, 1972). Elevations in the Emery Coal field vary from 6,000 feet to over 8,000 feet.

Outcropping rocks of the Emery Coal Field range in age from Lower Cretaceous to Quaternary in age. The rock record reflects oscillating transgressive and regressive sequences that include, in ascending order, fluvial through littoral (Dakota Sandstone), marine (Tununk Shale), fluvial and lagoonal (Ferron Sandstone) and marine (Blue Gate Shale, Emery Sandstone, Masuk Shale) depositional environments. Unconformably overlying Cretaceous sedimentary rocks are Tertiary volcanics and Quaternary deposits. The major coal-bearing unit in the Emery Coal Field is the Ferron Sandstone.

Annual precipitation varies from 30 inches in the Upper Ivie Creek drainage to slightly more than 7 inches per year at the minesite. The area around the minesite could be considered a semi-arid to arid climate regime.

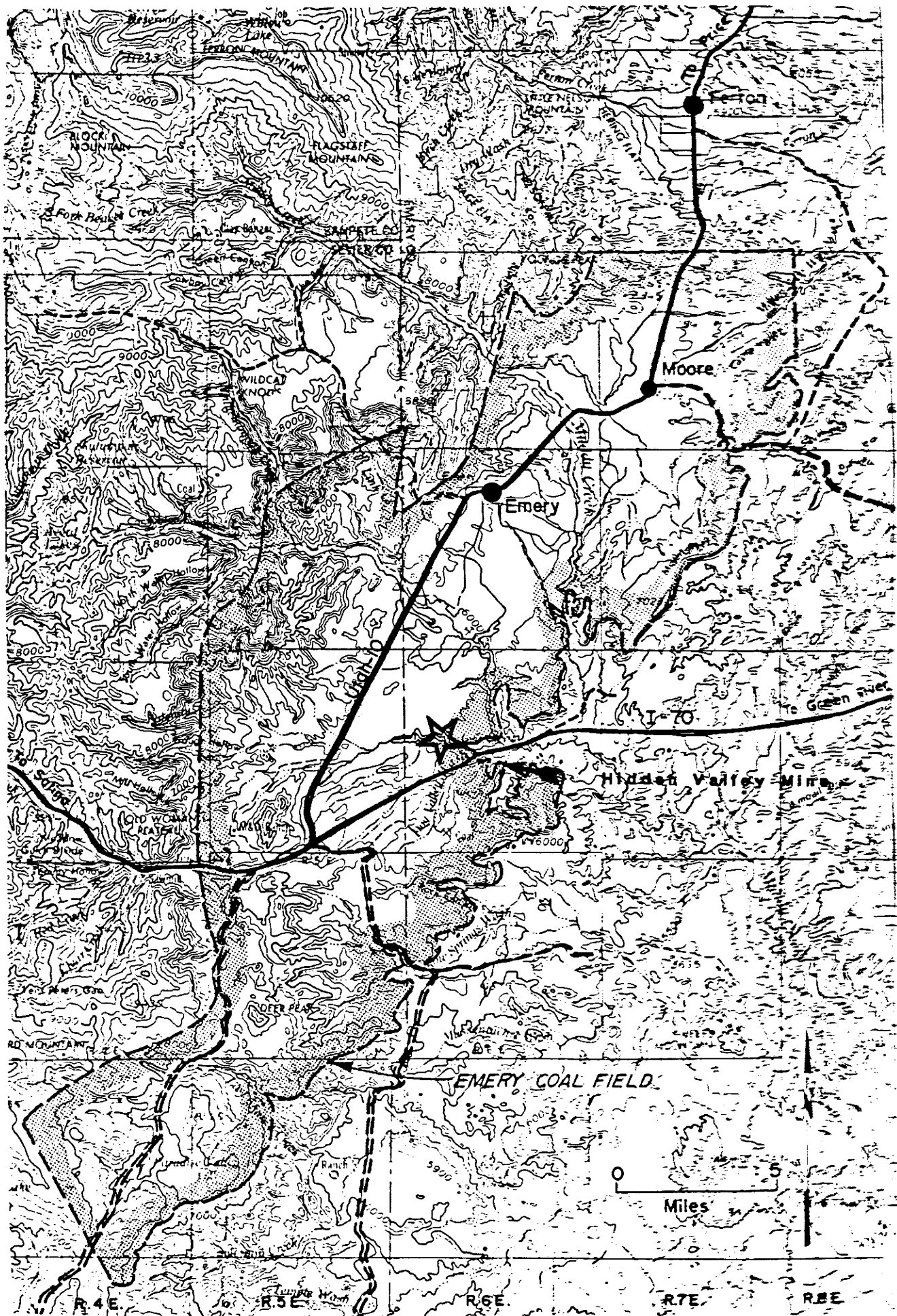


Figure 1. Emery Coal Field

Vegetative types found within the vicinity of the Emery Coal Field area are part of the Desert Shrub and Pinyon-Juniper plant associations. The desert shrub association occurs on the lower benches and valley bottoms. The Pinyon-Juniper plant association occurs on the higher benches and upper slopes where the soils are more sandy and better drained.

The Emery Deep Mine and proposed Emery Surface Mine are located along Quitchapah Creek approximately 2.5 miles north of the Hidden Valley Mine. The J. B. King Mine located approximately 2.5 miles south of the Hidden Valley Mine has been reclaimed. The active, proposed and reclaimed mines are all sited within the Emery Coal Field. Permitting actions have derived Cumulative Hydrologic Impact Assessments (CHIAs) for the Emery Deep Mine and the J. B. King Mine. CHIA findings for the J. B. King Mine indicate minimal mining-induced impacts to surface and ground-water resources (J.B.. King Mine CHIA), whereas those for the Emery Deep Mine suggest increased salt loading to Quitchapah Creek and decreased ground-water levels in the Ferron Sandstone aquifer (Emery Deep Mine CHIA).

II. CUMULATIVE IMPACT AREA (CIA)

Figure 2 delineates the CIA for the Hidden Valley Mine. The CIA includes the SE 1/4 of Section 12, E 1/2 of Section 13, and NW 1/4 of Section 24, Township 23 South, Range 5 East and the S 1/2 of Section 7, S 1/2 of Section 8, N 1/2 of Section 19, N 1/2 of Section 20, Section 18 and Section 17, Township 23 South, Range 6E. The CIA encompasses 3,200 acres.

III. SCOPE OF MINING

Development mining within the study area began on April 17, 1980 following approval under the Interim Program Regulations.

The permit area encompasses 910 acres. Development mining occurred in the A and C/D seams of the Ferron Sandstone and consisted of two exploratory adits driven total lengths of approximately 240 feet (C/D seam) and 260 feet (A seam). Total underground development was less than 1/4 acre.

Surface disturbance encompassed approximately 7.0 acres and consisted of constructing and installing a road, pads and drainage control structures.

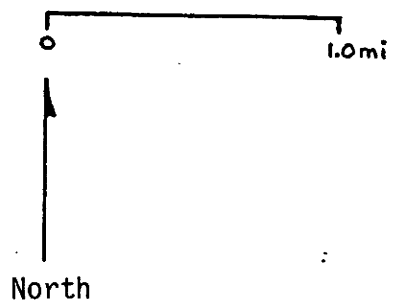
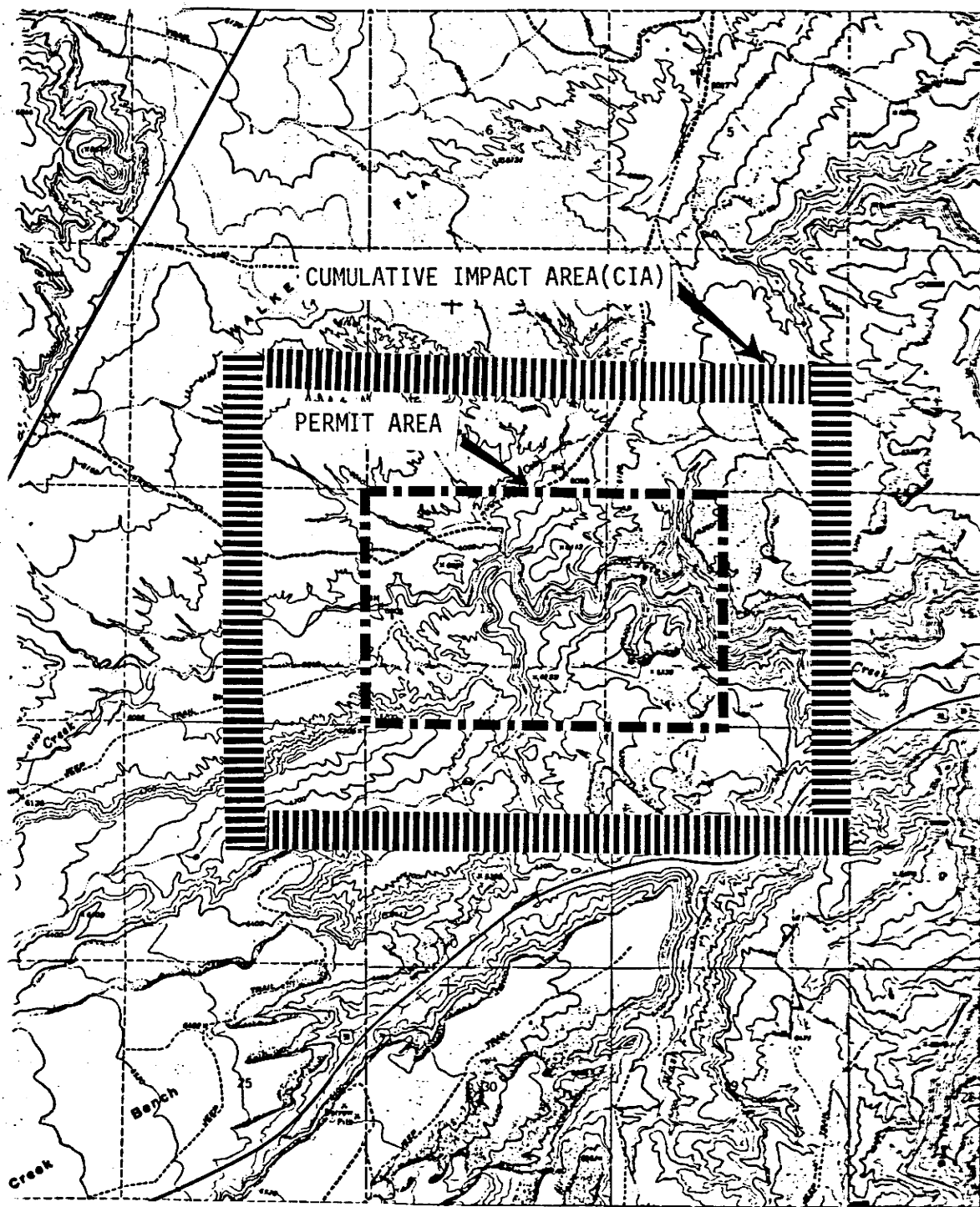


Figure 2. Cumulative Impact Area (CIA).

IV. STUDY AREA

A. Geology

Stratigraphic units outcropping within the study area include, from oldest to youngest, the Tununk Shale, Ferron Sandstone, Blue Gate Shale and Quaternary deposits. Lithologic descriptions and unit thicknesses are given in Figure 3.

System	Series	Stratigraphic Unit	Thickness (feet)	Description
Quaternary	Holocene	Quaternary Deposits	Variable	Surficial stream terrace and alluvial fan deposits.
	Pleistocene			
Upper Cretaceous	Coniacian	Blue Gate Shale Member	1,600	Pale blue-gray, nodular and irregularly bedded marine mudstone and silt-stone.
	Turonian	Ferron Sandstone Member (major coal seams)	400-500	Alternating yellow-gray sandstone, sandy shale and gray shale with important coal beds of Emery Coal Field.
	Cenomanian	Tununk Shale Member	600-700	Blue-gray to black sandy marine mudstone.

Figure 3. Stratigraphy of the Hidden Valley Mine Area (modified from Doelling 1972).

Rocks in the study area strike generally north and dip one to two degrees to the west. Principal coal accumulations occur within the Ferron Sandstone Member of the Mancos Shale. Two coal seams with economic potential have been identified and are termed, in ascending order, the Ferron "A" and "C/D" seams.

B. Topography and Precipitation

Topography ranges from less than 5800 feet to over 6400 feet in the CIA.

The study area is characterized by an easterly system of small exphemeral drainages.

Average annual precipitation is approximately 7 inches. The CIA may be classified as semi-arid.

C. Vegetation

The majority of vegetation of the CIA can be classified within Desert Shrub and Pinyon-Juniper Vegetation Associations. Desert Shrub types occupying lower benches, valley bottoms and rocky cliffs include Shadscale - Galleta grass, Shadscale - Indian ricegrass - Drop seed, Mat saltbush - Indian ricegrass, and Greasewood - Saltgrass. Pinyon and Juniper woodlands occupy higher benches and upper slopes. Understory vegetation of the woodlands include either Sagebrush species and Galleta grass or Mixed Mountain Shrub species.

Riparian vegetation is limited to narrow ribbons of dense vegetation along both perennial and intermittent creeks. Common plants include Greasewood, Reed canary grass, Saltgrass, Rabbitbrush and Tamarisk.

V. HYDROLOGIC RESOURCES

A. Ground Water

The ground-water regime within the CIA is dependent upon climatic and geologic parameters that establish systems of recharge, movement and discharge.

Springs do not occur within and adjacent to the CIA. Exploration drilling (4 boreholes) within the permit area encountered subsurface water in the Ferron Sandstone. Three of the boreholes, located in the western portion of the permit area, encountered artesian conditions. Wells drilled to similar depths in the eastern portion of the permit area were dry. All boreholes were plugged and abandoned in compliance with Chapter I of the Coal Mining and Reclamation Permanent Program.

Morrissey, Lines and Bartholoma (1980) identified the Ferron Sandstone aquifer as a regional ground-water resource of the Emery Coal Field and concluded that recharge to the Ferron Sandstone aquifer occurs mainly as subsurface inflow from the Wasatch Plateau. Moreover, natural discharge occurs to alluvium along streams, leakage to the

underlying Tununk Shale, upward leakage to the Blue Gate Shale and negligible discharge by seeps and springs (Morrissey, Lines and Bartholoma, 1980).

Data derived by the operator indicate water quality of the Ferron Sandstone aquifer is characterized by elevated sulfate, bicarbonate and sodium values.

B. Surface Water

The Hidden Valley Mine site is located within a 1590 square mile area which forms the Muddy Creek drainage basin. The largest stream in the area is Muddy Creek, with Quitchupah and Ivie Creek being the only other streams of significant size. Muddy Creek flows southwest and converges with the Fremont River which then forms the Dirty Devil River. The Dirty Devil River converges with the Colorado River in southeastern Utah. The total drainage area for Ivie Creek is about 131 square miles, or 8.2 percent of the Muddy Creek Drainage Area. The average land slope is 21 percent.

VI. POTENTIAL HYDROLOGIC IMPACTS

A. Ground Water

The only recognizable ground-water resource within the CIA is the Ferron Sandstone aquifer. Development mining, of less than 1/4 acre, did not intercept the ground-water resource. Accordingly, a mining or reclamation induced dewatering impact is determined to have a low probability.

Mining development consisted of two exploratory adits approximately 20 feet wide and 250 feet long. Potential subsidence encompasses less than 1/4 acre at the surface and will not occur within the aquifer recharge area. Accordingly, ground-water impacts related to mining-induced subsidence are determined to be negligible.

B. Surface Water

No material damage to surface water has occurred because of the limited development at the Hidden Valley Mine. Sediment control is currently in place and will remain in place until the reclamation bond is released. Any sediment loading associated with reclamation of minor ephemeral channels will be minimal or non-existent due to the use of alternative sediment controls and riprap protection in the channels.

No material damage is expected to occur during reclamation due to the operator's use of silt fences to trap and treat any runoff waters from disturbed areas adjacent to reclaimed channels. Other water

quality parameters have not been considered due to the nature of the disturbance and its anticipated impact. Accordingly, the surface water impacts associated with reclamation are determined to be negligible.

CONCLUSIONS

Mining in the Wasatch Plateau Coal Field is considered sufficiently removed hydrologically that it will not adversely impact water resources in the Emery Coal Field area. Hydrologic impacts associated with J. B. King Mine have been determined to be minimal. An assessment of hydrologic impacts related to the Emery Deep Mine and proposed Emery Surface Mine indicates an increase in salt loading and decrease in ground-water levels.

Hydrologic impacts associated with the Hidden Valley Mine will contribute negligibly to the impacts identified for the Emery Deep Mine and proposed Emery Surface Mine. Accordingly, it is herein determined that the reclamation plan for the Hidden Valley Mine is consistent with preventing damage to the hydrologic balance outside the permit area.

0920R/30

REFERENCES

- Utah Division of Oil, Gas and Mining, 1985, J. B. King Mine: Cumulative Hydrologic Impact Assessment, Final Technical Analysis, 10p.
- Doelling, H. H., 1972. Central Utah coal fields: Sevier-Sanpete, Wasatch, Plateau, Book Cliffs and Emery: Utah Geological and Mineral Survey, Monograph Ser. No. 3.
- Morrissey, D. J., Lines, G. C., and Bartholoma, S. D., 1980, Three-dimensional digital-computer model of the Ferron Sandstone aquifer near Emery, Utah: U. S. Geological Survey, Water Resources Invest. 80-62, 101p.
- Office of Surface Mining, 1985, Emery Deep Mine: Cumulative Hydrologic Impact Assessment, Final Technical Analysis, 11p.



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Norman H. Bangerter
Governor

Dee C. Hansen
Executive Director

Dianne R. Nielson, Ph.D.
Division Director

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340

October 9, 1991

Mr. Lee Edmonson
CALMAT Company
Properties Division
1801 East University Drive
Phoenix, Arizona 85034


Dear Mr. Edmonson:

Re: Determination of Completeness, Five-Year Permit Renewal, Hidden Valley Coal Company, Hidden Valley Coal Mine, ACT/015/007, Folder #3, Emery County, Utah

The permit renewal application submitted September 25, 1991 has been reviewed and determined administratively complete.

Upon receipt of this letter, Hidden Valley Coal Company must publish an advertisement in the Emery County Progress and the Newspaper Agency Corporation, providing all information as required by R614-300-121.100. A notarized proof of publication should be sent to the Division following the consecutive four-week advertisement period.

Sincerely,


Pamela Grubaugh-Littig
Permit Supervisor

PGL/jbe
AT015007C



CONSULTANTS GROUP

GEOLOGY

ENGINEERING

ENVIRONMENT

HYDROLOGY

DEC 30 1991

DIVISION OF
OIL GAS & MINING

December 26, 1991

Ms. Pam Grubaugh-Littig
Permit Supervisor
Utah Division of Oil, Gas and Mining
3 Triad Center, Suite 350
Salt Lake City, Utah 84180

Dear Ms. Grubaugh-Littig,

Enclosed is the affidavit of publication for Calmat's Hidden Valley Coal Company Permit Renewal Notice. This Notice was published in the Emery County Progress in four issues beginning with the November 12, 1991 issue. If any more information is needed on this matter, please contact me or Lee Edmunson with Calmat.

Sincerely,

Karla Knoop
Hydrologist

Copies: Joe Jarvis, JBR, Cedar City
JBR SLC Office File
Lee Edmunson, CalMat

Principal Office:
8160 South Highland Drive, Suite A-4
Sandy, Utah 84093
(801) 943-4144
Fax: (801) 942-1852

Reno Office:
245 East Liberty St., Suite 402
Reno, Nevada 89501
P.O. Box 41238, Reno, Nevada 89504
(702) 329-5531

Cedar City Office:
865 South Cedar Knolls West
Cedar City, Utah 84720
(801) 586-8793

AFFIDAVIT OF PUBLICATION

STATE OF UTAH)

ss.

County of Emery,)

I, Dan Stockburger, on oath, say that I am the Publisher of the Emery County Progress, a weekly newspaper of general circulation, published at Castle Dale, State and County aforesaid, and that a certain notice, a true copy of which is hereto attached, was published in the full issue of such newspaper forFour....(4).....consecutive issues, and that the first publication was on the

.....12th....day of...November.....,19....91

and that the last publication of such notice was in the issue of

such newspaper dated the

3rdday of.....December.....,19....91

[Signature]

Subscribed and sworn to before me this

3rdday of.....December.....,19....91

[Signature]
Notary Public

My Commission expires January 10, 1995

Residing at Price, Utah

Publication fee, \$.....96.00.....

NOTICE

Hidden Valley Coal Company, 1801 East University Drive; Phoenix, Arizona 85034 hereby announces the filing of an application for Permit Renewal for the Hidden Valley Coal Mine in Emery County, Utah with the Division of Oil, Gas and Mining and the Office of Surface Mining under the laws of the State of Utah and the United States.

Approval of the renewal application would allow Hidden Valley Coal Company to continue reclamation activities, for an additional five years, as set forth in the Final Reclamation Plan for the Hidden Valley Coal Mine. The Final Reclamation Plan was approved in January, 1987. Copies of the Plan are available for public inspection at the Utah Division of Oil, Gas and Mining, 3 Triad Center, Suite 350; Salt Lake City Utah 84180-1203 and the Emery County Courthouse, Records Office; Castle Dale, Utah 84513.

Written comments, objections or requests for an informal conference should be submitted to Mr. Lowell Braxton, Utah Division of Oil, Gas and Mining, 3 Triad Center, Suite 350; Salt Lake City, Utah 84180-1203. Said comments, objections or requests must be submitted within thirty (30) days from November 12, 1991.

The permit area is contained on the U.S.G.S. 7.5-minute "Walker Flat" quadrangle map.

The permit area is 960 acres. The surface is owned by Hidden Valley Coal Company and the coal is leased from Ivie Creek Coal Associates. The disturbed area that has been reclaimed is approximately 7 acres.

Description of the permit area:

Section 17: W1/2

Section 18: All

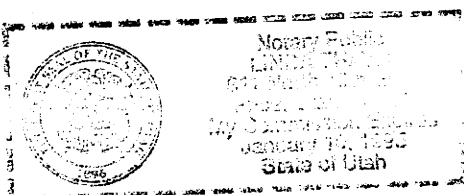
Township 23 South, Range 6 East, Salt Lake Meridian

Description of the disturbed area which has been reclaimed:

Section 17 NW1/4

Township 23 South, Range 6 East, Salt Lake Meridian

Published in the Emery County Progress November 12, 19, 26 and December 3, 1991.





State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Norman H. Bangerter

Governor

Dee C. Hansen

Executive Director

Dianne R. Nielson, Ph.D.

Division Director

355 West North Temple

3 Triad Center, Suite 350

Salt Lake City, Utah 84180-1203

801-538-5340

October 22, 1991

Mr. Robert Hagen, Director
Office of Surface Mining
Reclamation and Enforcement
Suite 310, Silver Square
625 Silver Avenue, S. W.
Albuquerque, New Mexico 87102

Dear Mr. Hagen:

Re: Determination of Completeness, Hidden Valley Coal Company, Hidden Valley Mine, ACT/015/007, Folder #3, Carbon County, Utah

The Utah Division of Oil, Gas and Mining has determined the five-year permit renewal application for Hidden Valley Coal Mine to be administratively complete. Notice is hereby given to all appropriate agencies in accordance with R614-300-121.300 of the Utah Coal Mining Reclamation Act.

The permit area is located in Emery County, Utah and is described as follows:

Township 23 South, Range 6 East, SLBM

Section 17: W1/2

Section 18: All

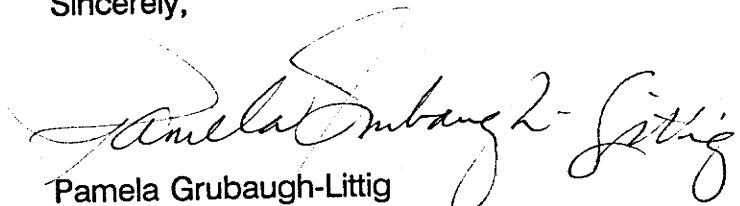
A decision will be made as to approval or disapproval of the permit renewal application. No decision will be taken by the Director for a minimum period of 30 days after submission of this Notice of Availability to the appropriate agencies. This plan is available for public review at: Division of Oil, Gas and Mining, 355 West North Temple, 3 Triad Center, Suite 350, Salt Lake City, Utah 84180-1203.

Comments on the Permit Application Package may be addressed to the
Director:

Dr. Dianne R. Nielson, Director
Division of Oil, Gas and Mining
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

For Further information, please contact: Mr. Lowell P. Braxton, Associate
Director, or Pamela Grubaugh-Littig, Permit Supervisor, at the above address.

Sincerely,



Pamela Grubaugh-Littig
Permit Supervisor

PGL/jbe
A:\HV.DOC

Mr. Robert Hagen, Director
Office of Surface Mining
Reclamation and Enforcement
Suite 310, Silver Square
625 Silver Avenue, S. W.
Albuquerque, New Mexico 87102

Mr. Brent Bradford, Assistant Director
Office of the Executive Director
Department of Environmental Quality
288 North 1460 West
Salt Lake City, Utah 84116-4810

Mr. Timothy H. Provan, Director
Utah Division of Wildlife Resources
1596 West North Temple
Salt Lake City, Utah 84116

Mr. Bill Howell
Southeastern Utah Association
of Local Governments
P.O. Box 1106
Price, Utah 84501

Mr. Bryant Anderson
Emery County Planning and Zoning
P.O. Box 297
Castle Dale, Utah 84513



Norman H. Bangerter
Governor
Dee C. Hansen
Executive Director
Dianne R. Nielson, Ph.D.
Division Director

State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340

February 4, 1992

Pam

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Dear Mr. 2~:

Re: Notification of Permit Renewal, Hidden Valley Coal Company, Hidden Valley Mine, ACT/015/007, Folder #2, Emery County, Utah

The Utah Division of Oil, Gas and Mining renewed the reclamation permit for the Hidden Valley Mine, effective January 30, 1992. Notice is hereby given to all appropriate agencies and individuals having jurisdiction over, or an interest in the area, of the renewal, pursuant to R645-300-152.

This permit authorizes the permittee, Hidden Valley Coal Company, to conduct reclamation activities on the described lands within the permit area at the Hidden Valley Mine situated in the State of Utah, County of Emery, subject to the terms of the approved reclamation plan, the permit, and all applicable laws and regulations. Reclamation activities are permitted within the following area:

Township 23 South, Range 6 East, SLBM

Section 17: W1/2
Section 18: All

If you have any questions, please call Pamela Grubaugh-Littig.

Sincerely,

Lowell P. Braxton
Associate Director, Mining

jbe

A:\007006.NPR

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